

NWAC Remote Data Network

Selected photos of the NWAC remote weather data network



Figure 1. Alpental ski area base weather station, with heated precipitation gage, total depth sensor (on long sensor arm), and air temperature/relative humidity sensor (left hand side of platform). Data logger is in enclosure at base of precipitation gage. This station is combined with data from mid elevation (top chair 1) and higher elevation sit (top chair 2 and top Denny Mountain) to provide a vertical hourly profile of the atmosphere near Snoqualmie Pass—necessary for efficient and effective avalanche control (photo by WSDOT John Stimberis).



Figure 2. Washington Pass upper wind site (on south ridge leading toward Cutthroat Ridge). Installed in summer of 2005 and replaces old wind station near Washington Pass overlook (photo by M. Moore).



Figure 3. Washington Pass Ridge tower with wind speed, direction, lightning rod, omni-directional radio antenna, solar panel, datalogger enclosure, air temperature/relative humidity sensor. Installed as joint NWAC/WSDOT site in summer of 2005. Not shown are multiple RV batteries and grounding rod at base of tower. This site acts as a repeater for a more sheltered locatioin near the pass level which measures snowdepth, precipitation, temperature and relative humidity (photo by M. Moore)



Figure 4. Close up of Washington Pass Ridge Rohn 45G tower showing wind sensors (speed and direction), ATRH sensor and shield, solar panel, data logger, junction box, RF antenna and lightning rod (photo by M. Moore).



Figure 5. Sunrise, Mt Rainier weather station. Station accessed via phone to data logger. Site also acts as a base station for spread spectrum RF link to ridge location (Sunknob), as well as two remote stations (ridge and pass) near Chinook Pass. Photo shows the 30 ft Rohn tower, total snowdepth sensor, air temperature/relative humidity sensor and shield, solar panel, RF antenna, lightning rod, and cumulative ETI precipitation gage with bilge pump and two storage drums for new and used precipitation storage solutions. Two deep cycle RV batteries are used with solar panel to power the station (photo by M. Moore).